Printing date 07/15/2024

*

*

| Identification | |
|---|--------------------|
| Product identifier | CFR\/A |
| Trade name: <u>Albumin bovine Fraction V</u> | serving scientists |
| • Article number: 11924 • CAS Number: 9048-46-8 • EC number: 232-936-2 | |
| Application of the substance / the mixture: Laboratory chemicals | |
| Details of the supplier of the safety data sheet Manufacturer/Supplier: SERVA Electrophoresis GmbH Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de | SISCI |
| Information department: Product Safety Department Tel.: +49 6221 Emergency telephone number: Emergency medical information in case of poisoning Poison Information Center Mainz-Tel: +49 (0) 6131 19240 (Advice in German and English) | 13840-35 |
| P Hazard(s) identification | |
| • Classification of the substance or mixture The substance is not classified, according to the Globally Harmonized | l System (GHS). |
| · Label elements | |
| GHS label elements Void Hazard pictograms: Void Signal word: Void Hazard statements: Void Classification system: NFPA ratings (scale 0 - 4) | |
| GHS label elements Void Hazard pictograms: Void Signal word: Void Hazard statements: Void Classification system: | |
| GHS label elements Void Hazard pictograms: Void Signal word: Void Hazard statements: Void Classification system: NFPA ratings (scale 0 - 4) Health = 0 Fire = 0 | |
| GHS label elements Void Hazard pictograms: Void Signal word: Void Hazard statements: Void Classification system: NFPA ratings (scale $0 - 4$) Health = 0 Fire = 0 Reactivity = 0 | |

(Contd. on page 2)

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Substances
- CAS No. Description: 9048-46-8 Albumins, blood serum
- Identification number(s):
- EC number: 232-936-2
- Description:
- MW: ca. 67000

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor. *After eye contact:*
- Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.
- · After swallowing:
- Rinse out mouth. Drink plenty of water and provide fresh air. Consult a doctor in case of complaints.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO_{2} extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • Special hazards arising from the substance or mixture
- Formation of hazardous vapors and gases possible during heating or in case of fire. In case of fire, the following can be released:
- Carbon monoxide and carbon dioxide
- Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Wear protective clothing.
 Ensure adequate ventilation
 Avoid formation of dust.
 Do not inhale dusts.
 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up Dispose contaminated material as waste according to section 13. Pick up mechanically.*
- · Protective Action Criteria for Chemicals
- PAC-1: Substance is not listed.
- PAC-2: Substance is not listed.

(Contd. on page 3)

US

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

PAC-3: Substance is not listed.
Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

• Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. No special measures required. Prevent formation of dust.

· Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- *Requirements to be met by storerooms and receptacles:* Storage at +2 to +8 °C Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Store container tightly closed and dry.
- Protect from exposure to the light.
- \cdot Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Additional information about design of technical systems: No further data; see section 7.
- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Store protective clothing separately.
- Immediately remove all soiled and contaminated clothing.
- Avoid contact with the eyes and skin.
- Wash hands before breaks and at the end of work.
- Breathing equipment: Suitable respiratory protective device recommended.
- · Protection of hands:
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- *Penetration time of glove material: The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- \cdot For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Nitrile rubber, NBR Chloroprene rubber, CR

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

· Eye protection: Safety glasses

· Body protection: Protective work clothing

| 9 Physical and chemical properties | |
|--|--|
| · Information on basic physical and chemical | properties |
| · General Information: | |
| · Color: | cream-white |
| · Odor: | Characteristic |
| • Odor threshold: | Not determined. |
| • Melting point/Melting range: | No information available |
| · Boiling point/Boiling range: | No information available |
| · Flammability (solid, gaseous): | No information available |
| • Explosion limits: | * |
| · Lower: | No information available |
| · Upper: | No information available |
| · Flash point: | No information available |
| • Decomposition temperature: | No information available |
| · pH-value: | 6.8-7.2 |
| · Viscosity: | |
| · Kinematic viscosity: | No information available |
| · Dynamic viscosity: | No information available |
| · Solubility in / Miscibility with: | v |
| · Water: | Soluble. |
| · Partition coefficient (n-octanol/water): | No information available |
| · Vapor pressure: | No information available |
| · Vapor pressure: | v |
| · Density: | No information available |
| · Relative density: | No information available |
| • Other information | Further physicochemical data are not available. |
| · Appearance: | |
| · Form: | lyophilisate |
| · Important information on protection of healt | h and |
| environment, and on safety: | |
| • Danger of explosion: | The product is not explosive, but the formation of |
| | explosive dust/air mixtures is possible. |
| • Molecular weight | ~67,000 g/mol |

10 Stability and reactivity

- *Reactivity:* No further relevant information available.
- · Chemical stability:
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions: No further relevant information available.
- Conditions to avoid: High temperatures

Exposure to light

- · Incompatible materials: Avoid contact with strong oxidizing agents.
- Hazardous decomposition products: In case of fire: see section 5

11 Toxicological information

· Information on toxicological effects

· Acute toxicity: Based on available data, the classification criteria are not met.

(Contd. on page 5)

(Contd. of page 3)

US

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

- (Contd. of page 4)
- \cdot on the skin: Based on available data, the classification criteria are not met.
- \cdot on the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- Specific target organ toxicity single exposure: Based on available data, the classification criteria are not met.
- Specific target organ toxicity repeated exposure:
- Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.
- Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- · Toxicity:
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability: No further relevant information available.
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Results of PBT and vPvB assessment:
- **PBT:** Concentration of substances classified as PBT: < 0,1%
- vPvB: Concentration of substances classified as vPvB: < 0.1%
- · Other adverse effects:
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system. Water hazard class 1 (Self-assessment): slightly hazardous for water

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Dispose of in accordance with official regulations.
- · Uncleaned packagings:
- · Recommendation:

Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

* **14 Transport information**

- · UN-Number
- · DOT, ADR, ADN, IMDG, IATA
- UN proper shipping name • DOT, ADR, ADN, IMDG, IATA

Void

Void

(Contd. on page 6)

s –

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

| | (Contd. of page |
|---|--|
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA · Class | Void |
| · Packing group · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code | of Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN ''Model Regulation'': | Void |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65 Substance is not listed.
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product Safety Department
- · Contact: +49 6221 13840-35
- · Date of preparation / last revision 07/15/2024 / -
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

- ICAO: International Civil Aviation Organisation
- PBT: persistent, bioaccumulative, toxic substance (REACH)
- vPvB: very persistent, very bioaccumulative substance (REACH)
- REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
- CLP: Regulation on classification, labelling and packaging of substances and mixtures bw: body weight

(Contd. on page 7)

Printing date 07/15/2024

Reviewed on 07/15/2024

Trade name: Albumin bovine Fraction V

| (Contd. of page 6) ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) |
|--|
| IMDG: International Maritime Code for Dangerous Goods |
| DOT: US Department of Transportation |
| IATA: International Air Transport Association |
| EINECS: European Inventory of Existing Commercial Chemical Substances |
| CAS: Chemical Abstracts Service (division of the American Chemical Society) |
| NFPA: National Fire Protection Association (USA) |
| HMIS: Hazardous Materials Identification System (USA) |
| PBT: Persistent, Bioaccumulative and Toxic |
| vPvB: very Persistent and very Bioaccumulative |
| NIOSH: National Institute for Occupational Safety |
| OSHA: Occupational Safety & Health |
| TLV: Threshold Limit Value |
| PEL: Permissible Exposure Limit |
| REL: Recommended Exposure Limit |